



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,756	11/10/2003	Gregory D. Fee	MS1-1809US	4286
22801	7590	05/23/2008		
LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			EXAMINER BAYOU, YONAS A	
			ART UNIT 2134	PAPER NUMBER
			MAIL DATE 05/23/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/705,756

Applicant(s)

FEE ET AL.

Examiner

YONAS BAYOU

Art Unit

2134

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 and 37-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 and 37-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/10/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This office action is in response to applicant's response filed on 01/28/2008.
2. Claims 1-35 and 37-48 are pending.
3. Claim 36 is cancelled.
4. Claims 1, 6, 17, 22, 33 and 44 are amended.
5. Examiner withdraws rejection of claims 6 and 33 under 35 U.S.C 101 due to correction by the applicant.
6. Applicant's arguments have been fully considered but they are not persuasive.
7. When responding to the Office action, Applicant is advised to clearly point out the patentable novelty the claims present in view of the state of the art disclosed by the reference(s) cited or the objection made. A showing of how the amendments avoid such references or objections must also be present. See 37 C.F.R. 1.111(c).

Response to Arguments

1. Applicant, on pages 17-18, of the remarks, argues "in the method of claims 1, 17, 33 and 44, Gong does not teach receiving a manifest defining a plurality of code assemblies that are members of at least one application, wherein the manifest defines at least one trusted application and application evidence for making a trusted decision."

Examiner respectfully disagrees and asserts that Gong discloses that code from code stream 220 is object oriented software. Consequently, the code is in the form of

Art Unit: 2134

methods associated with objects that belong to classes. In response to instructions embodied by code executed by code executor 210, code executor 210 creates one or more objects 240. An object is a record of data combined with the procedures and functions that manipulate the record. All objects belong to a class. Each object belonging to a class has the same fields ("attributes") and the same methods. The methods are the procedures, functions, or routines used to manipulate the object. An object is said to be an "instance" of the class to which the object belongs. [see, for example, 7:20-33 and figs. 2A-2B; class corresponding to manifest]. Class definitions are generated from source code written by a programmer. For example, a programmer using a Java Development Kit enters source code that conforms to the Java programming language into a source file. The source code embodies class definitions and other instructions which are used to generate byte code which controls the execution of a code executor (i.e. a Java virtual machine). Techniques for defining classes and generating code executed by a code executor, such as a Java virtual machine, are well known to those skilled in the art. Each class defined by a class definition from code stream 220 is associated with a class name 238 ("identifier") and a code source 236. The class definition contains information used to specify the class name associated with a class. The code source represents a source of code from which is code received, such as a particular set of one or more files or code stream from a trusted source or untrusted source. Code executor 210 maintains an association between a class and its class name and code source. The code source may be a composite record containing a uniform resource locator ("URL") 234 and set of public

cryptographic keys 236. A URL identifies a particular source. The URL is a string used to uniquely identify any server connected to the world wide web. A URL may also be used to designate sources local to computer system 100. Typically, the URL includes the designation of the file and directory of the file that is the source of the code stream that a server is providing. A public cryptographic key, herein referred to as a key, is used to validate the digital signature which may be included in a file used to transport related code and data. Public cryptographic keys and digital signatures are described in Schneier, *Applied Cryptography*, (1996). The keys may be contained in the file, may be contained in a database associating keys with sources (e.g. URLs), or be accessible using other possible alternative techniques. A class may be associated with the digital signature associated with the file used to transport code defining the class, or the class definition of the class may be specifically associated with a digital signature. A class that is associated with a valid digital signature is referred to as being signed. Valid digital signatures are digital signatures that can be verified by known keys stored in a database. If a class is associated with a digital signature which can not be verified, or the class is not associated with any digital signature, the class is referred to as being unsigned. Unsigned classes may be associated with a default key. A key may be associated with a name, which may be used to look up the key in the database. While one code source format has been described as including data indicating a cryptographic key and URL, alternate formats are possible. Other information indicating the source of the code, or combinations thereof, may be used to represent code sources. Therefore, it is understood that the present invention, is not limited to any particular format for a code

source [7:34-8:59; 12:15-33 and figs. 2A- 4; Public cryptographic keys and digital signatures corresponding to application evidence].

2. Applicant, on pages 18-19, of the remarks, argues "in the method of claims 6, 22, 33 and 44, Gong does not teach generating a permission grant set ... if application evidence for the at least one application satisfies at least one condition specified in a security policy specification for trusting the application, wherein the security policy specification defines multiple policy levels."

Examiner respectfully disagrees and asserts that Gong discloses that The <URL> and a key corresponding to the <key name> represent a code source; the <action> and <target> represent a permission. A key is associated with a key name. The key and the corresponding key name are stored together in a key database. The key name can be used to find the key in the key database. Instruction 420-1 in FIG. 4, for example, is therefore an authorization of a permission to write to any file in "/tmp/" by any object of the classes associated with code source "file://bank"--"clerk" (i.e. URL-key). Access controller 280 is mechanism used to determine whether a particular action is authorized. Whenever the need to determine whether a particular action is authorized arises, a request to determine whether a particular action is authorized is transmitted to access controller 280. The access controller then determines whether the action is authorized based on the set of permissions contained by protection domains associated with the requestor of the action [12:15-33 and fig. 4].

Art Unit: 2134

3. Examiner, however, in light of the above submission maintains the previous rejections while considering the amendments to the claims as follows:

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 4-11, 13-18, 20-27, 29-33, 35-39, 41-48 are rejected under 35 U.S.C. 102(e) as being anticipated by Gong, US Patent No. 6,044,467 (hereinafter Gong).

Referring to claims 1, 2, 6, 7, 17, 22-23, 33 and 44, Gong teaches a computer program product, a system, a computer-readable medium and a method comprising:

receiving a manifest defining a plurality of code assemblies that are members of at least one application, wherein the manifest defines at least one trusted application and application evidence for making a trusted decision [6:31-36; 7:20-8:59 and figs.

2A-2B; Public cryptographic keys and digital signatures corresponding to application evidence and class is corresponding to a manifest];

evaluating the application evidence to determine if the at least on application is trusted **[3:27-29; 6:39-43; 7:20-8:59]**; and

generating a permission grant set for each code assembly that is a member of the at least one application if the application evidence satisfies at least one condition for trusting the at least one application **[6:45-50]**; and

passing the permission grant to a run-time call stack **[12:16-33; 14:66-67 and fig. 2B]**.

Referring to claims 4, 5, 15, 16, 20, 21, 31, 32 and 35, Gong teaches a computer program product, a system, a computer-readable medium and a method further comprising evaluating application evidence at an application level/group level and a code assembly level before trusting the at least one application **[column 11, lines 12-16, sources are corresponding to code assembly level]**.

Referring to claims 8, 24, 37 Gong teaches a computer program product, a system, a computer-readable medium and a method further comprising determining if the code assembly is a member of the at least one application **[column 7, lines 20-25]**.

Referring to claims 9 and 25, Gong teaches a computer program product, a system, a computer-readable medium and a method further comprising receiving a manifest defining members of the at least one application **[column 6, lines 31-36]**.

Referring to claims 10, 26 and 38, Gong teaches a computer program product, a system, a computer-readable medium and a method, wherein satisfying at least one trust condition is based at least in part on evidence provided with the at least one application **[column 6, lines 35-43]**.

Referring to claims 11, 27 and 39, Gong teaches a computer program product, a system, a computer-readable medium and a method, wherein satisfying at least one trust condition is based at least in part on evidence external to the at least one application **[column 10, lines 5-11]**.

Referring to claims 13, 29 and 41, Gong teaches a computer program product, a system, a computer-readable medium and a method, wherein satisfying at least one trust condition is based on evidence from user interaction **[column 10, lines 31-39]**.

Referring to claims 14, 30 and 42, Gong teaches a computer program product, a system, a computer-readable medium and a method, wherein satisfying at least one trust condition is based on evidence from evaluation of previous trust decisions **[column 3, lines 16-21]**.

Referring to claim 43, Gong teaches a computer program product, a system, a computer-readable medium and a method further comprising a security policy specification defining the condition **[column 11, line 58 – column 12, line 5-11 and fig. 2B]**.

Referring to claim 45, Gong teaches a computer program product, a system, a computer-readable medium and a method, wherein the first data field defines a group of applications **[column 7, lines 53-58]**.

Referring to claims 46 and 47, Gong teaches a computer program product, a system, a computer-readable medium and a method further comprising a third data field identifying a location of one of the members of the at least one application **[column 6, lines 52-61]**.

Referring to claim 48, Gong teaches a computer program product, a system, a computer-readable medium and a method further comprising a third data field requesting different levels of trust for different members of the at least one application **[column 19, lines 1-7]**.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 3, 12, 19, 28, 34 and 40 are rejected under 35 U.S.C. 103(a) as being obvious over Gong Patent No. 6,044,467 in view of Lao et al. Pub. No. US 2003/0220880 A1.

Referring to claims 3, 12, 19, 28, 34 and 40, Gong teaches a method of receiving a manifest defining a plurality of code assemblies that are members of at least one application **[column 6, lines 31-36]** and evaluating application evidence for the at least one application **[column 6, lines 39-43]** (see claim 1 above). Gong further teaches generating a permission grant set for each code assembly **[column 6, lines 45-50]**. Gong does not appear to explicitly teach a method wherein evaluating application evidence is based at least in part on an XrML license. However, Lao teaches a method such that access is granted based on a license, such as an XrML license, and the like, can be presented **[paragraph 0166]**. Gong and Lao are analogous art because both teach application security.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the method of Gong to include a method such that access is granted based on a license, such as an XrML license of Lao because XrML license controls and specifies a manner of use of consumption of a distributed network service.

Conclusion

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YONAS BAYOU whose telephone number is (571)272-7610. The examiner can normally be reached on m-f,7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on 571-272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Yonas Bayou/

Examiner, Art Unit 2134

05/20/2008

/Kambiz Zand/

Supervisory Patent Examiner, Art Unit 2134